

BLYMYER ENGINEERS, INC.

1829 Clement Avenue

Alameda, California 94501-1396

(510) 521-3773 FAX: (510) 865-2594

LETTER OF TRANSMITTAL

DATE February 13, 1995	BEI Job No. 89070
ATTENTION: SUSAN HUGO	
CITY: EMERYVILLE	
SIC:	
COMPONENT:	
PM: MICHAEL S. LEWIS	

STID 363

Alameda Co. Health Care Services

Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor

Alameda, CA 94502

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1	2/13/95		QUARTERLY GROUNDWATER MONITORING
			1301-65TH STREET

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- For approval
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REMARKS:
THE ENCLOSED QUARTERLY GROUNDWATER MONITORING REPORT IS FOR YOUR USE.

COPY TO:
CAROLINE BAXTER

SIGNED: MICHAEL S. LEWIS/DS

If enclosures are not as noted, kindly notify Blymyer Engineers, Inc. at once.

February 13, 1995
BEI Job No. 89070

Ms. Caroline Baxter
1301 65th Street Association
1939 Harrison Street, Suite 605
Oakland, CA 94612

**Subject: Quarterly Groundwater Monitoring
1301 65th Street
Emeryville, California**

Dear Ms. Baxter:

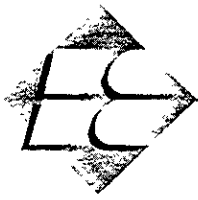
This letter constitutes the quarterly groundwater monitoring report for the period October 1994 through December 1994 for the subject site. This work was performed in accordance with the letter from Blymyer Engineers to the Alameda County Department of Environmental Health (ACDEH), dated July 11, 1994, and the letter from the ACDEH to Mr. Charles Gensler, dated October 14, 1994.

1.0 Introduction

1.1 Background

One 2,000-gallon gasoline underground storage tank (UST) was removed from the subject site on June 9, 1988. The UST removal was performed for the previous property owner, Mr. Charles Gensler, under the supervision of Blymyer Engineers. The UST was installed in 1952 and had been out-of-service since 1972. The UST was inspected upon removal and two 1-inch-diameter holes were found. Groundwater infiltrated the excavation to a depth of approximately 12 feet below ground surface (bgs). A sheen was visible on the groundwater in the excavation. Three soil samples were collected from the bottom of the excavation and analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Only one soil sample contained detectable concentrations of TPH as gasoline at 180 milligrams per kilogram (mg/kg), or parts per million, and benzene at 0.053 mg/kg. The UST backfill material, consisting of partially cemented foundry sand, was excavated, aerated on-site, and properly disposed of off the site.

One 23-foot-deep, 2-inch-diameter groundwater monitoring well, MW-1, was installed by Blymyer Engineers on June 8, 1988, in the inferred downgradient direction (southwest). The



monitoring well was installed 25 feet from the UST excavation, rather than within 10 feet as specified in the Regional Water Quality Control Board's *Tri-Regional Guidelines*, due to the presence of an overhead power line. Soil samples were collected during the installation of the monitoring well at approximate depths of 5, 10, and 15 feet bgs. The soil samples were analyzed for TPH as gasoline and BTEX. In the soil sample collected at approximately 5 feet bgs, TPH as gasoline was detected at 35 mg/kg, benzene at 0.580 mg/kg, toluene at 0.460 mg/kg, ethylbenzene at 0.670 mg/kg, and total xylenes at 4.9 mg/kg. In the soil sample collected at approximately 10 feet bgs, TPH as gasoline was detected at 0.630 mg/kg and benzene at 0.020 mg/kg. TPH as gasoline and BTEX were not detected in the soil sample collected at approximately 15 feet bgs.

Groundwater was encountered initially during drilling at a depth of approximately 14.5 feet bgs and stabilized at a depth of approximately 3 to 4 feet bgs. The site stratigraphy generally consisted of clay with varying amounts of silt and sand.

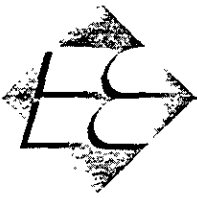
A groundwater sample was initially collected from well MW-1 on June 10, 1988, and quarterly groundwater sampling was performed from February 1989 to May 1991. Quarterly groundwater sampling was resumed in May 1994. The groundwater sample analytical results for all previous sampling events are summarized in Table I.

A neighboring site file review was performed in May 1994 to establish the regional groundwater flow direction. Based on the review of the ACDEH files for several neighboring sites, groundwater in the immediate vicinity of the subject site appears to flow generally towards the west to southwest, which is towards San Francisco Bay.

1.2 Site Conditions

The subject site is located in an industrial area in northern Emeryville, California (Figure 1). The site consists of a single building surrounded by asphalt and concrete paving. The former gasoline UST was located in the northwest portion of the site in a former automobile parking area (Figure 2). The site is presently occupied by Sybase, a computer software developer.

The site is located approximately 2,500 feet east of San Francisco Bay at an approximate elevation of 20 feet above mean sea level.



2.0 Data Collection

2.1 Groundwater Elevation Measurements

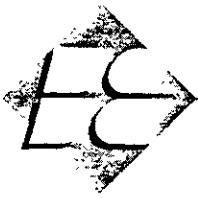
In accordance with the requirements in the letter from the ACDEH, dated October 14, 1994, the top-of-casing (TOC) elevation for well MW-1 at the subject site was surveyed relative to the TOC of well MW-1 at the adjacent Rix Industries site. The TOC elevations for wells MW-1, MW-2, and MW-3 at the Rix Industries site were previously surveyed by Hageman-Aguilar, Inc., the environmental consultant for the Rix Industries site, relative to an arbitrary datum of 100.00 feet, set for the TOC of well MW-1. The depths to groundwater in well MW-1 at the subject site and wells MW-1, MW-2, and MW-3 at the Rix Industries site were measured by Blymyer Engineers and Hageman-Aguilar prior to coordinated sampling on November 11, 1994. The TOC elevations, depths to groundwater, and groundwater elevations for these four wells are summarized in Table II.

2.2 Groundwater Sample Collection

A groundwater sample was collected from well MW-1 at the subject site by Blymyer Engineers on November 11, 1994. Prior to sampling, approximately three well casing volumes (10.25 gallons) of groundwater were purged from the well using a disposable polyethylene bailer and placed in a DOT-approved, 55-gallon drum for later disposal by the client. Temperature, conductivity, and pH were measured initially and after the removal of each well casing volume. A representative groundwater sample was collected and placed in three 40-milliliter vials, containing hydrochloric acid preservative, provided by the laboratory. The vials were fitted with Teflon[®]-lined lids, labeled, and placed in a cooler with blue ice. The Well Purging and Sampling Data form is included in Appendix A.

2.3 Analytical Methods and Results

The groundwater sample was delivered via courier to National Environmental Testing, Inc. (NET), a California-certified analytical laboratory, and analyzed for TPH as gasoline using modified EPA Method 8015 and BTEX using EPA Method 8020. The analytical results are summarized in Table I and the laboratory report is included in Appendix A.



3.0 Data Interpretation

3.1 Groundwater Gradient

The depth to groundwater in well MW-1 has decreased 1.34 feet since the last groundwater sampling event. Based on the groundwater elevations in well MW-1 and the wells at the neighboring Rix Industries site, the direction of groundwater flow on November 11, 1994, was determined to be generally to the southwest (Figure 2), which is generally consistent with the flow direction determined at nearby sites. The approximate groundwater gradient was 0.059 feet per foot. The interpretation of groundwater contours depicted in Figure 2 was made within the confines of the spatial distribution of the data points.

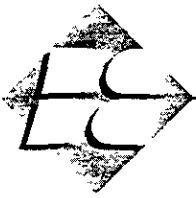
3.2 Discussion of Groundwater Sample Analytical Results

TPH as gasoline and ethylbenzene were not found in the groundwater sample above the respective method reporting limits. Benzene, toluene, and total xylenes were detected in the groundwater sample at concentrations of 28, 4.3, and 5.0 micrograms per liter ($\mu\text{g/L}$), respectively. This represents an increase in benzene, toluene, and total xylenes concentrations since the last groundwater sampling event. However, the benzene concentration is still well below the historical high concentration of 440 $\mu\text{g/L}$ in the February 1990 groundwater sampling event.

4.0 Additional Information

The following additional information is provided in response to the issues presented in the letter from the ACDEH to Mr. Charles Gensler, dated October 14, 1994. The numbering of the items is the same as those in the ACDEH letter:

- #2 A Bore & Well Construction Log for well MW-1 at the subject site is presented as Appendix B.
- #3 The petroleum-contaminated soil excavated to remove the gasoline UST was aerated on-site to reduce the TPH concentrations to less than 100 mg/kg. The aerated soil was then transported for disposal at West Contra Costa Landfill in Richmond, California. Copies of the analytical report for the soil samples collected after aeration and a letter and check from Blymyer Engineers to West Contra Costa Landfill for the disposal of the soil are



presented as Appendix C. No weight tickets or other documentation for the soil disposal were provided by West Contra Costa Landfill.

- #5 The former UST at the subject site only stored gasoline. The Underground Tank Closure/Modification Plans for the removal of this UST incorrectly stated that the UST stored diesel.

5.0 Recommendations

A copy of this report should be submitted to the following regulatory agencies:

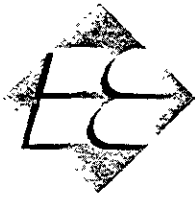
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502
Attn: Susan Hugo

California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612
Attn: Richard Heitt

Blymyer Engineers recommends that quarterly groundwater elevation measurements and sampling, coordinated with the Rix Industries site, be continued in accordance with ACDEH requirements.

6.0 Limitations

Services performed by Blymyer Engineers, Inc. have been provided in accordance with generally accepted professional practices for the nature and conditions of similar work completed in the same or similar localities, at the time the work was performed. The scope of work for the project was conducted within the limitations prescribed by the client. This report is not meant to represent a legal opinion. No other warranty, expressed or implied, is made. This report was prepared for the sole use of 1301 65th Street Association.

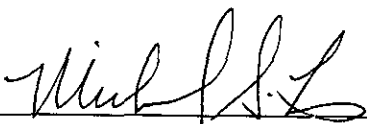


Ms. Caroline Baxter
February 13, 1995
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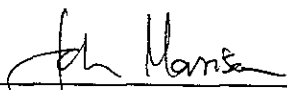
If you have any questions, please contact Mike Lewis at (510) 521-3773.

Cordially,

Blymyer Engineers, Inc.

By: 
Michael S. Lewis
Vice-President, Technical Services



And: 
John Morrison, R.G.
Director, Earth Sciences

cc: Mr. Robert Coussan
Mr. Charles Gensler
Joe Armao, Esq.

Enclosures:

Table I:	Summary of Groundwater Sample Analytical Results
Table II:	Groundwater Elevations
Figure 1:	Site Location Map
Figure 2:	Site Plan
Appendix A:	Well Purging and Sampling Data Form, August 2, 1994, and Laboratory Report, NET, August 16, 1994
Appendix B:	Bore & Well Construction Log, MW-1
Appendix C:	Laboratory Report, NET Pacific, August 29, 1988, and Letter and Check from Blymyer Engineers, Inc. to West Contra Costa Landfill, September 23, 1988

TABLES

**Table I, Summary of Groundwater Sample Analytical Results
 1301 65th Street Association
 1301 65th Street, Emeryville, California
 BEI Job No. 89070**

Monitoring Well	Sampling Date	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Total Xylenes
		8015M	8020	8020	8020	8020
		mg/L	µg/L	µg/L	µg/L	µg/L
MW-1	6/10/88*	1.4	<3	<10	<4	15
	2/13/89	0.21	<1	<0.9	5.6	<2
	5/8/89	0.36	79	<2	7.5	<4
	8/8/89	0.24	21	<2	5.2	<7
	11/8/89	0.44	270	<3	5.9	<9
	2/8/90	0.56	440	5.6	13	<10
	5/10/90	0.29	200	<3	<5	<10
	8/8/90	0.62	430	<5	25	<10
	11/12/90	0.18	9.4	1.8	<0.5	<0.5
	2/11/91	1.3	45	1.9	4.8	0.7
	5/14/91	1.0	61	<0.5	9.5	1.9
	5/2/94	<0.05	<0.5	<0.5	<0.5	<0.5
	8/2/94	<0.05	31	<0.5	3.4	2.7
	8/25/94	<0.05	13	<0.5	<0.5	<0.5
	11/11/94	<0.05	28	4.3	<0.5	5.0

* Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 624

TPH = Total Petroleum Hydrocarbons
 mg/L = milligrams per liter (parts per million)
 µg/L = micrograms per liter (parts per billion)

Note: For results shown as <x, x represents the method reporting limit.

Table II, Groundwater Elevations
1301 65th Street Association/Rix Industries
1301 65th Street/6460 Hollis Street, Emeryville, California
BEI Job No. 89070

Monitoring Well	Date	TOC Elevation* (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
MW-1 ¹	11/11/94	100.66	2.24	98.42
MW-1 ²	11/11/94	100.00	2.08	97.92
MW-2 ²	11/11/94	100.04	1.89	98.15
MW-3 ²	11/11/94	101.99	2.38	99.61

TOC = Top-of-Casing

* Arbitrary datum of 100.00 feet is top-of-rim on MW-1 well box at Rix Industries site

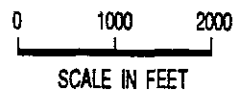
¹ Monitoring well at 1301 65th Street Association site

² Monitoring wells at Rix Industries site

FIGURES



SOURCE: UNITED STATES GEOGRAPHICAL SURVEY 7.5' QUAD. "OAKLAND WEST, CA" PHOTOREVISED 1980.



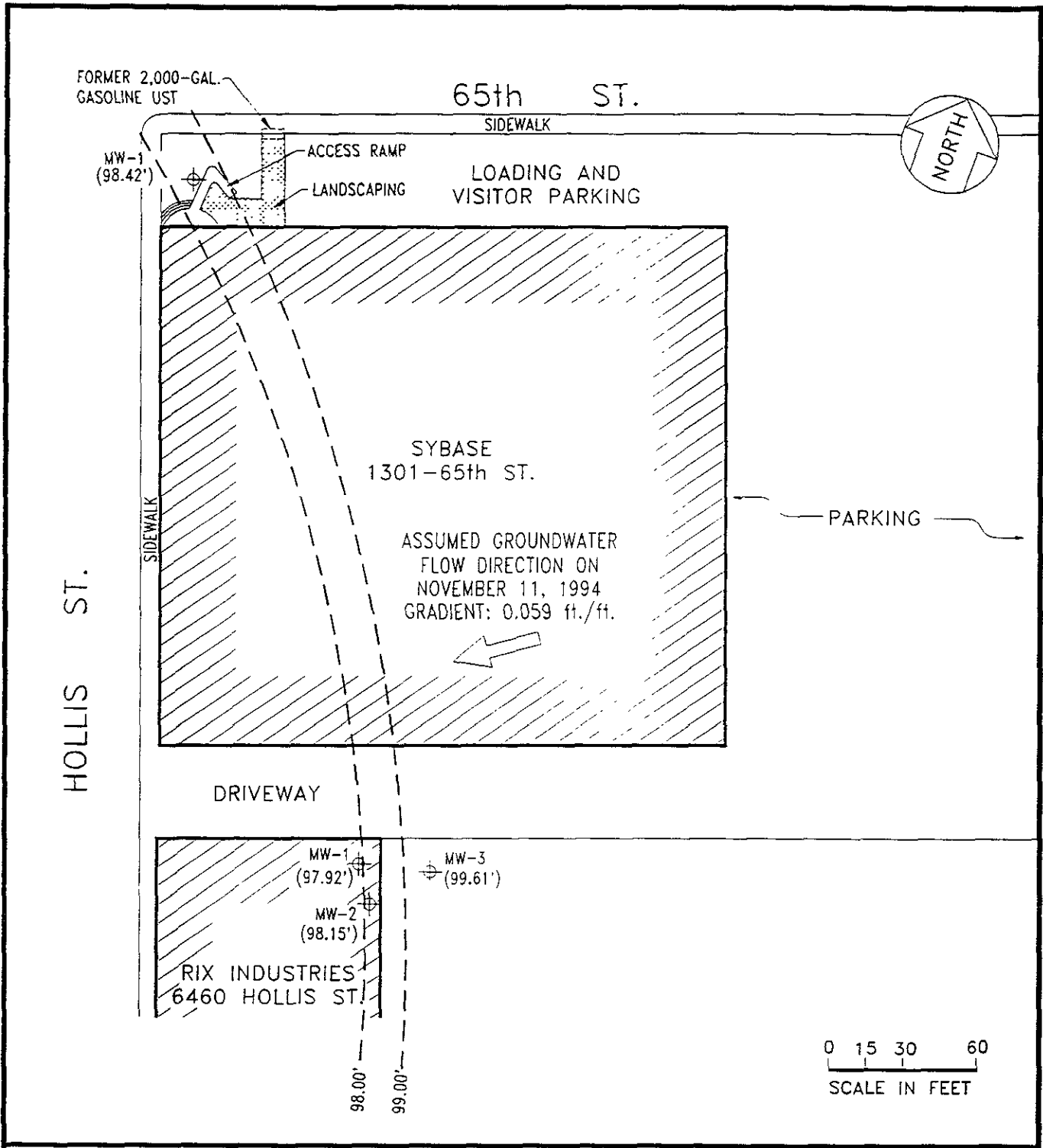
SITE LOCATION MAP
 1301 65th ST. ASSOCIATION
 1301 65th ST.
 EMERYVILLE, CA

FIGURE
 1



BEI JOB NO. 89070 DATE 5/24/94

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		LEGEND MONITORING WELL (98.42') GROUNDWATER ELEVATION ON 11/11/94 UST UNDERGROUND STORAGE TANK	SITE PLAN 1301 65th ST. ASSOCIATION EMERYVILLE, CA, CA	FIGURE 2
BEI JOB NO. 89070	DATE 12/14/94			

APPENDIX A
WELL PURGING AND SAMPLING DATA FORM, NOVEMBER 11, 1994
LABORATORY REPORT, NET, NOVEMBER 21, 1994

Well Purging and Sampling Data

Date	11/11/94	Project Number	89070	Project Name	Peterson
Well Number	MW-1	Boring Diameter	N/A	Casing Diameter	2"

Column of Liquid in Well		Volume to be Removed	
Depth to product	N/A	Gallons per foot of casing	= 0.17 gal/ft.
Depth to water	2.24 ft.	Column of water	x 20.11 ft.
Total depth of well	22.35 ft.	Volume of casing	= 3.4 gal.
Column of water	20.11 ft.	No. of volumes to remove	x 3
		Total volume to remove	= 10.2 gal.

Method of measuring liquid	Oil/water interface probe
Method of purging well	Disposable polyethylene bailer
Method of decontamination	Liqui-nox and distilled water

Physical appearance of water (clarity, color, particulates, odor)	
Initial	Slightly silty, reddish color, no odor
During	Silty, reddish color, no odor
Final	Silty, reddish color, no odor

Field Analysis	Initial	During		Final
Time	14:10	14:17	14:23	14:29
Temperature (F)	63.8	64.8	65.8	66.0
Conductivity (us/cm)	2010	1923	1935	1866
pH	7.27	6.91	6.57	6.55
Method of measurement	Hydac meter			
Total volume purged	10.25 gal.			
Comments	Well box flooded. No sign of water ingress. Sampled with disposable polyethylene bailer.			

Sample Number	Amount of Sample
MW-1	3-40ml VOA w/HCl

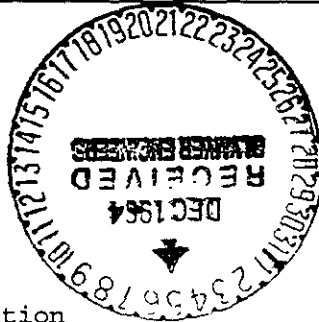
Signed/Sampler	Date
<i>Steph W. Moore</i>	11/11/94
Signed/Reviewer	Date
<i>Mich P. L.</i>	11/11/94



NATIONAL
ENVIRONMENTAL
TESTING, INC.

Santa Rosa Division
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Mike Lewis
Blymyer Engineers, Inc
1829 Clement Ave
Alameda, CA 94501



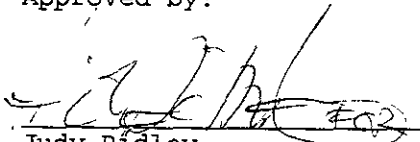
Date: 11/21/1994
NET Client Acct. No: 49500
NET Pacific Job No: 94.05495
Received: 11/15/1994
REVISED: 12/02/1994


Client Reference Information

Peterson/Emeryville, CA/89070

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:


Judy Ridley
Project Coordinator


Jim Hoch
Operations Manager

Enclosure(s)





Client Name: Blymyer Engineers, Inc
 Client Acct: 49500
 NET Job No: 94.05495

Date: 11/21/1994
 ELAP Cert: 1386
 Page: 2

Ref: Peterson/Emeryville, CA/89070

SAMPLE DESCRIPTION: MW-1
 Date Taken: 11/11/1994
 Time Taken: 14:35
 NET Sample No: 222597

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						11/17/1994	2312
DILUTION FACTOR*	1						11/17/1994	2312
as Gasoline	ND	**	0.05	mg/L	5030		11/17/1994	2312
METHOD 8020 (GC,Liquid)	--						11/17/1994	2312
Benzene	28		0.5	ug/L	8020		11/17/1994	2312
Toluene	4.3		0.5	ug/L	8020		11/17/1994	2312
Ethylbenzene	ND		0.5	ug/L	8020		11/17/1994	2312
Xylenes (Total)	5.0		0.5	ug/L	8020		11/17/1994	2312
SURROGATE RESULTS	--						11/17/1994	2312
Bromofluorobenzene (SURR)	106			% Rec.	5030		11/17/1994	2312

** : The positive result of 0.30 mg/L quantified as Gasoline appears to be a lighter hydrocarbon than gasoline.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Name: Blymyer Engineers, Inc
Client Acct: 49500
NET Job No: 94.05495

Date: 11/21/1994
ELAP Cert: 1386
Page: 3

Ref: Peterson/Emeryville, CA/89070

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Units	Date Analyzed	Analyst Initials
	Standard % Recovery	Standard Amount Found	Standard Amount Expected			
TPH (Gas/BTEX, Liquid)						
as Gasoline	98.0	0.98	1.00	mg/L	11/17/1994	aal
Benzene	109.2	5.46	5.00	ug/L	11/17/1994	aal
Toluene	94.8	4.74	5.00	ug/L	11/17/1994	aal
Ethylbenzene	100.0	5.00	5.00	ug/L	11/17/1994	aal
Xylenes (Total)	100.0	15.0	15.0	ug/L	11/17/1994	aal
Bromofluorobenzene (SURR)	110.0	110	100	% Rec.	11/17/1994	aal

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Name: Blymyer Engineers, Inc
Client Acct: 49500
NET Job No: 94.05495

Date: 11/21/1994
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Page: 4

Ref: Peterson/Emeryville, CA/89070

METHOD BLANK REPORT

Parameter	Method	Amount	Reporting	Units	Date	Analyst
	Blank	Found	Limit		Analyzed	Initials
TPH (Gas/BTXE, Liquid)						
as Gasoline	ND	0.05		mg/L	11/17/1994	aal
Benzene	ND	0.5		ug/L	11/17/1994	aal
Toluene	ND	0.5		ug/L	11/17/1994	aal
Ethylbenzene	ND	0.5		ug/L	11/17/1994	aal
Xylenes (Total)	ND	0.5		ug/L	11/17/1994	aal
Bromofluorobenzene (SURR)		103		% Rec.	11/17/1994	aal

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Name: Blymyer Engineers, Inc
Client Acct: 49500
NET Job No: 94.05495

Date: 11/21/1994
ELAP Cert: 1386
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Ref: Peterson/Emeryville, CA/89070

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	Matrix Spike % Rec.	Spike Dup % Rec.	RPD			Matrix Spike Conc.	Matrix Spike Dup. Conc.			
TPH (Gas/BTEX, Liquid)										
as Gasoline	92.0	87.0	5.6	1.00	ND	0.92	0.87	mg/L	11/17/1994	aal
Benzene	88.1	93.5	5.9	20.1	ND	17.7	18.8	ug/L	11/17/1994	aal
Toluene	96.8	96.8	0.0	55.8	ND	54.0	54.0	ug/L	11/17/1994	aal

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. Actual reporting limits and results have been multiplied by the listed dilution factor. Do not multiply the reporting limits or reported values by the dilution factor.
- dw : Result expressed as dry weight.
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than the applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2] / mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, Rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, Rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986., Rev. 1, December 1987.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.



CHAIN OF CUSTODY RECORD

JOB # 89070		PROJECT NAME/LOCATION Peterson/Emeryville CA										TURNAROUND TIME: Standard DAY(S)		
SAMPLERS (SIGNATURE) <i>Steph W Moore</i>												REMARKS:		
DATE	TIME	COMP	CRAB	SAMPLE NAME/LOCATION	# OF CONTAINERS	TPH AS GASOLINE + BTXE (MOD EPA 8015/8020)	TPH AS DIESEL (MOD EPA 8015)	VOC (EPA 624/8240)	SEMI-VOC (EPA 625/8270)	TRPH (EPA 418.1)	BTXE (EPA 8020/602)	HOLD		
11/11/94	1435		X	MW-1	3	X								
REQUESTED BY: Mike Lewis						RESULTS AND INVOICE TO: Blymyer Engineers Inc.								
RELINQUISHED BY: (SIGNATURE) <i>Steph W Moore</i>		DATE / TIME 11/14/94 11:40		RECEIVED BY: (SIGNATURE) <i>DKunhe</i>		RELINQUISHED BY: (SIGNATURE) <i>DKunhe</i>		DATE / TIME 11/14/94 16:02		RECEIVED BY: (SIGNATURE)				
RELINQUISHED BY: (SIGNATURE)		DATE / TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Richardson</i>		DATE / TIME 11/14/94 08:05		REMARKS: NET						

*11/14/94
DKunhe
Real. Intact JG*

APPENDIX B
BORE & WELL CONSTRUCTION LOG, MW-1

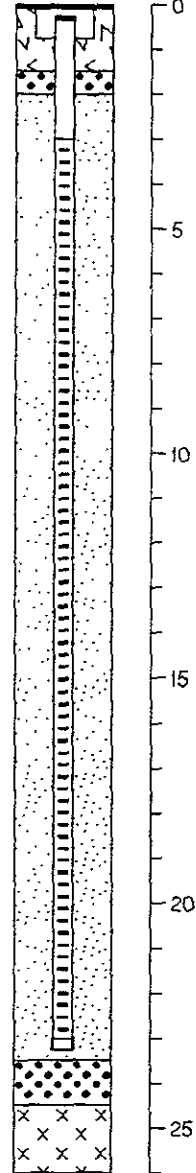
BLMYER ENGINEERS, INC.

BORE & WELL CONSTRUCTION LOG: MW-1

Job No.: 89070
 Client: Henry Horn and Sons
 Site: 1301 65th Street
 Emeryville, CA
 Date Drilled: 6/8/88
 Logged By: S. Costella/ENSCO Env. Services

Drilling Company: All Terrain Exploration
 Driller: Harry
 Drilling Equipment: Hollow Stem Auger
 Sample Method: Lined Split-spoon
 Bore Diameter: 8 in.
 Total Depth: 26 ft.

Depth (ft.)	Blows/6 In.	P.I.D. (ppm)	Sample Intervals Cored/Analyzed	Well Completion Depth: 23 ft.		Initial Water Depth: ∇ 14.4 ft.	
				Component Size/Type	Depths in feet From To	Stabilized Water Depth: ∇	Water Depth
				Surface Completion: Flush Traffic Rated Vault with Locking Cap Surface Seal: Cement 00 1.50 Annular Seal: Cement Seal: Bentonite 1.50 2.00 Sand Pack: #3-16 Sand 2.00 23.50 Bottom Seal: Bentonite 23.50 24.50 Blank Casing: 2" Diam. PVC 25 3.00 Screened Casing: 0.02" Slot-2" Diam. PVC 3.00 23.00		Unified Soil Classification	Graphic Log
LITHOLOGIC DESCRIPTION							
0				ASPHALT	A		
				Sandy GRAVEL FILL	F		
				Dark brown CLAY, with minor amounts of silt and fine grained sand; damp; slight odor	CH		
5	7 15 28		■	Gray-green sandy CLAY; with fine to coarse grained sand; hard; damp; slight odor mottled light brown; few root holes			
10	5 8 10		■	silty; very stiff; damp; very slight odor			
15	8 13 20		■	less silty; hard; wet; odorless; root holes (0.375-0.625 in. in diameter)			∇ 14.4'
20	10 15 19		■	gray mottling; odorless; trace organic staining; few shell fragments			
25	9 11 14		■	Light brown sandy CLAY, very silty; very stiff; wet; odorless; one 4 in. thick black silty sand lens	CL		
				Bore terminated at 26 ft.			



APPENDIX C
LABORATORY REPORT, NET PACIFIC, AUGUST 29, 1988
LETTER AND CHECK FROM BLYMYER ENGINEERS TO WEST CONTRA COSTA
LANDFILL, SEPTEMBER 23, 1988



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Formerly: ANATEC Labs, Inc.

Sue Black
Blymyer Engineers, Inc
1829 Clement Ave
Alameda, CA 94501

08-29-88
NET Pacific Log No: 3914 (1-4)
Series No: 495/018
Client Ref: Project# 88216

Subject: Analytical Results for Four Soil Samples Identified as "Henry Horn & Sons, 1301 65th St., Emeryville, CA" Received 08-09-88.


Dear Ms. Black:

Analysis of the samples referenced above has been completed. This report is written in confirmation of results transmitted verbally on August 29, 1988. Results are presented on the following pages.

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

Approved by:


Kenneth A. Crawford
Project Chemist


Kim L. Hansard
Project Manager

/sm

Enc: Sample Custody Document



495/018 LOG NO 3914

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August 29, 1988

KEY TO ABBREVIATIONS

- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- NA : Not analyzed; see cover letter for details.
- ND : Not detected; the analyte concentration is less than the listed reporting limit.
- NR : Not requested.
- NTU : Nephelometric turbidity units.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.
- * : See cover letter for details.

THE COVER LETTER AND KEY TO ABBREVIATIONS ARE AN INTEGRAL PART OF THIS REPORT



495/018 LOG NO 3914

- 3 -

August 29, 1988

Descriptor, Lab No. and Results (mg/Kg)

Parameter	Reporting Limit (mg/Kg)	S-1	S-2	S-3	S-4
		08-08-88 1100	08-08-88 1105	08-08-88 1110	08-08-88 1115
		(-13681)	(-13682)	(-13683)	(-13684)
PETROLEUM HYDROCARBONS					
Volatile, as Gasoline	10	ND	18	39	ND
Benzene	0.05	ND	ND	0.062	ND
Toluene	0.05	ND	ND	0.24	ND
Xylenes, total	0.15	ND	0.24	0.88	ND

THE COVER LETTER AND KEY TO ABBREVIATIONS ARE AN INTEGRAL PART OF THIS REPORT

CHAIN OF CUSTODY RECORD

PROJ NO. 08216		PROJECT NAME HENRY HORN 1301 65th St. EMERYVILLE, CA. SONS		NO OF CON TAINERS	REMARKS TO ANATEC LABS/NET PACIFIC SANTA ROSA, CA
SAMPLERS: (Signature) Joe Black - BEI					
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION
S-1	8/9	11:00	X	S-1	SOIL PILE
S-2	8/9	11:05	X	S-2	SOIL PILE
S-3	8/9	11:10	X	S-3	SOIL PILE
S-4	8/9	11:15	X	S-4	SOIL PILE
STANDARD 10-DAY TAT					
SAMPLES PACKED ON ICE.					
NET TO PICK UP SAMPLES					
SAMPLES TAKEN AT AREAS LOCATED ON ATTACHED DRAWINGS SK-1, DATED 8/8/88, "FIRST SAMPLING ROUND".					
Relinquished by: (Signature) Joe Black		Date / Time 8/9/88 3:05	Received by: (Signature) Malcolm Jones		Relinquished by: (Signature)
Relinquished by: (Signature)		Date / Time	Received by: (Signature)		Date / Time
Relinquished by: (Signature) Malcolm Jones		Date / Time 8/9/88 19:20	Received for Laboratory by: (Signature) K Temple		Date / Time 8/9/88 1920
					Remarks 3914

Distribution: Original Accompanying Shipment; Copy to Character Field File

September 23, 1988
BEI Job No. 88216
UPS NEXT DAY AIR

WEST CONTRA COSTA LANDFILL
205-41st Street
Richmond, CA. 94805

Attention: Linda

Dear Linda:

Enclosed please find our check #7014 in the amount of \$250.00 for 50 cubic yards of dirt (\$5.00/yard x 50 yards). If there is a difference please bill us or mail a refund to our office. My phone number is 521-3773. The contractor hauling the soil is Pacific Bobcat.

Thank you.

Cordially yours,

BLYMYER ENGINEERS, INC.

Dan Gorecki
Environmental Specialist

DG/ds

Attachments

P.S. Enclosed also are lab analytical results and our submittal package.

**BLMYER & SONS
ENGINEERS. INC.**

1829 CLEMENT AVE. PH. 415-521-3773
ALAMEDA, CA 94501-1398



7014

Sept. 23, 1988

90-730
1211

PAY Two Hundred Fifty and no/100's ----- DOLLARS \$250.00

TO
THE
ORDER
OF

WCC Landfill
205 41st St.
Richmond, CA 94805

Attn: Linda

⑈007014⑈ ⑆121107303⑆ 010 91109⑈

BLMYER & SONS ENGINEERS, INC.
ALAMEDA, CA

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED

DELUXE - FORM WYO-2 V-2

DATE	DESCRIPTION	AMOUNT
9/23/88	88216 50 cu. yd. of dirt	250.00